

Instructions for conducting this exercise:

The following is an exercise that will illustrate the different new procedure that DPR has adopted in the newly developed Investigation Procedures.

This scenario consists of conducting an investigation and writing a final pesticide episode Investigation report. The first step of the exercise is to develop an investigative Plan from reviewing the Pesticide Illness Report (**page # 1**), and the information provided in the interview exercise described in (**page # 2**).

A suggested Investigative plan is proposed as (**pages #3,4**)

Page #5: consist of a list of questions designed to assist you in conducting your initial interview with Mr. Rafael Mendoza

Page # 6: is Exercise # 3, which consists of writing a brief narrative form the information, collected after your initial interview with Mr. Rafael Mendoza

Pages #7-12: These are the lab results that document that a drift had occurred.

Pages13-16: This is the final pesticide episode Investigation report

State of California
Environmental Protection Agency (Cal/EPA)

Office of Environmental
Health Hazard Assessment

PESTICIDE ILLNESS REPORT

(For illnesses caused by pesticides--including sanitizers and disinfectants)

PATIENT:

Name: **Rafael Mendoza** Age: **45** Sex: ☒ M ☐ F
Address: **1001 Beefsteak Ave. Apt. 3** City: **Roma** County: **Fairchild**
Phone No.: **(841) 477-4418** Social Security Number: **Unk**
Occupation: **Irrigator** Language: ☒ English ☒ Spanish ☐ Other

PHYSICIAN FILING REPORT:

Physician's name: **Dr. Nokitofa**
Physician's address: **71 Medical Plaza Court**
Roma, CA

Injury: **Field: Beefsteak F1**

At Address: City: County: **Fairchild**
Was Injury: ☐ At Home ☒ At Work - agriculture ☐ At Work – non-agriculture ☐ Other exposure
If at work: a) Employer's name **Rock Peace Farms**
Employer's address: **79 District Road**
Roma, CA
b) Manager or Supervisor: **Stephen Peace**
(841) 866-2867
Date of exposure: **6 / 21 / 05** Time of exposure: **[8:15]** a.m. **[:]** p.m.
Date of illness: **6 / 21 / 05** Date of death: **/ /**
Is there reason to believe others were exposed? ☒ No ☐ Yes

PATIENT'S DESCRIPTION OF EXPOSURE:

Activity at time of exposure:
☐ Applying Pesticides ☐ Manufacturing pesticides ☐ Mixing pesticides ☐ Entering pesticide areas
☐ Disposing of pesticides or their containers ☐ Eating contaminated food
☒ Other exposure (explain): **Pesticide from a helicopter drifted on me as I irrigated a tomato field.**
Name of pesticide(s): **Lorsban** Ingredient(s) of pesticide(s): **Chlorpyrifos**

INVESTIGATIVE PROCEDURES TRAINING

INTERVIEW EXERCISE

The following information is provided to allow a training participant to role-play the part of the victim of a pesticide exposure. Use the information below to answer the questions posed by the person role-playing the part of the investigator. If asked a question about the episode not covered by the information below, answer, 'I don't know.' or 'I don't remember.'

VICTIM INFORMATION:

NAME: Rafael Mendoza **AGE:** 45 **OCCUPATION:** Irrigator

EXPOSURE: I arrived at the tomato field (Fisher Ranch, Plot 4) at about 7:30 a.m. and began laying down aluminum sprinkler pipe. I was working alone and driving a company truck. After working for about a half an hour I noticed a helicopter spraying the next field (alfalfa) to the west. About 15 minutes later I felt some mist on my face and smelled a bad odor. A few minutes later I felt sick.

The helicopter was red and white. It was spraying about 50 yards from where I was when I felt the mist. I don't think the alfalfa field belongs to Rock Peace Farms.

SYMPTOMS: At first I felt sick to my stomach and became dizzy, then my face started itching and I started having a real bad headache. I continued to feel sick the rest of the day and night. The next day I felt better, but I had a rash on my face and hands that lasted for about three days.

- The odor smelled chemically.

MEDICAL: I called Mac and told him what happened. He told me to drive to the doctor's office on District Road. I had never been there before but I knew where it was. Dr. Nokitofa asked me some questions and gave me some cream to put on my face. There was no follow-up visit to the doctor.

EMPLOYER: Rock Peace Farms

I have been working for Rock Peace Farms for three years as an irrigator. My supervisor is Mac Berger.

- I received fieldworker training from my previous employer in 2001.
- Mac will usually tell me if the field I will be working in is under an REI.
- I am not aware of any display of application information at the office.
- I don't carry any information about pesticides in my work truck. (PSIS A-9)
- I don't know when the last application was made to the tomato field.
- There were no posting signs on the tomato field or the alfalfa field.
- I don't carry any wash water or supplies on the truck.
- My truck was parked on the other side of the tomato field and it was not sprayed
- I still have the short sleeve T-shirt I was wearing at the time of the incident at my house

Investigative Plan: Rafael Mendoza illness

1. Suspected violations (possible):

FAC section 12972. The use of any pesticide by any person shall be in such a manner as to prevent substantial drift to non-target areas.

FAC section 12973. The use of any pesticide shall not conflict with labeling registered pursuant to this chapter which is delivered with the pesticide or with any additional limitations applicable to the conditions of any permit issued by the director or commissioner.

3 CCR section 6600. General Standards of Care.

Each person performing pest control shall:

- (a) Use only pest control equipment which is in good repair and safe to operate.
- (b) Perform all pest control in a careful and effective manner.
- (c) Use only methods and equipment suitable to insure proper application of pesticides.
- (d) Perform all pest control under climatic conditions suitable to insure proper application of pesticides.
- (e) Exercise reasonable precautions to avoid contamination of the environment.

3 CCR section 6614. Protection of Persons, Animals, and Property.

- (a) An applicator prior to and while applying a pesticide shall evaluate the equipment to be used, meteorological conditions, the property to be treated, and surrounding properties to determine the likelihood of harm or damage.
- (b) Notwithstanding that substantial drift would be prevented, no pesticide application shall be made or continued when:
 - (1) There is a reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;
 - (2) There is a reasonable possibility of damage to non-target crops, animals, or other public or private property; or
 - (3) There is a reasonable possibility of contamination of non-target public or private property, including the creation of a health hazard, preventing normal use of such property. In determining a health hazard, the amount and toxicity of the pesticide, the type and uses of the property and related factors shall be considered.

2. People to Interview:

- Rafael Mendoza, injured person—find out if anyone else was present
- Stephen Peace, injured person's supervisor
- Helicopter pilot, applicator
- Witnesses as determined by interview with injured person

3. Samples to take:

- Clothing sample from Mendoza, possibly sleeve nearest application

- Gradient foliage samples: 3 in tomatoes, one in alfalfa
4. Other Evidence to collect:
 - Determine operator of Alfalfa field, get operator identification number or restricted materials permit
 - Check NOI log for other products used
 - Registration & license records of pilot
 - Pesticide label(s)
 - Pesticide use reports for application
 - Notice of completion
 - Written recommendation
 - Medical release
 - Diagram of use site & adjacent tomato field, indicating location of injured person and samples
 - Photographs of site
 5. Probable inspection activities: Grower Headquarters Employee Safety and Pest Control Business Headquarters Inspections.
 6. Summary of findings of fact to date: Currently the only information we have is from a Pesticide Illness Report, which is not yet confirmed: On June 21, 2005, at 08:15 hours, Rafael Mendoza was irrigating a tomato field (identified as Beefsteak F1) operated by his employer, Rock Peace Farms, 79 District Road, Roma, CA, when a helicopter began spraying an adjacent alfalfa field with Lorsban (active ingredient chlorpyrifos). He felt some spray mist hit his face and arms and smelled a bad odor that made him gag. He began to feel sick a few minutes later. He suffered from headache, nausea, dizziness, and itchiness on his face. No others are believed to have been exposed. At 15:45 hours, he saw Dr. Nokitofa in the physician's office at 71 Medical Plaza Court, Roma, CA. No diagnostic studies were ordered. Dr. Nokitofa diagnosed Mendoza with pesticide exposure, gave him reassurance and treated him with hydrocortisone cream.
 7. People who need to be provided with periodic updates:
 - My supervisor
 - Possibly Steve Peace, Mendoza's supervisor
 - DPR regarding samples
 8. Address agreements with other agencies and legal mandates:
 - Priority status: Not apparent at this point
 - Submit completed investigation to DPR within 120 days, by October 20, 2005

Suggested Interview Questions for the exposed irrigator:

You should have already collected data from the person interviewed that included complete name, address, telephone number or number where he could be contacted, and date of birth.

1. What were you doing when the incident occurred?
2. What time did you arrive at the field?
3. Was anyone else working with you?
4. Who is your supervisor?
5. Who scheduled you to work in the field when the incident occurred?
6. What happened that morning? Start from the time you arrived and describe what happened.
7. How did you feel?
When did you first begin to feel ill?
8. What symptoms did you develop?
How long did they last?
How do you feel now?
9. Describe what you saw, felt, tasted, or smelled at the field.
10. Describe the clothing you wore.
11. Do you have allergies, asthma, cold or flu?
12. Have you received any training regarding working in fields treated with pesticides?
Who gave you the training? When?
13. Has anyone told you about a pesticide application nearby or about nearby fields under a restricted entry interval? Who gave you that information?
14. Are you aware where pesticide application information is maintained?
15. Do you know where the property operator maintains pesticide use records, and safety information (A-9, MSDS, application-specific information)?
16. Do you know when the last application of pesticide was made to the tomato field?
17. Were there any posting signs in the tomato or alfalfa fields?
18. Do you have access to soap, water, and disposable towels at the work site?

Exercise #3

On 6/23/2005 around 1330, I, Colombo Smith, a biologist with Fairchild County Agricultural Commissioner's Office interviewed Mr. Rafael Mendoza in person at his workplace located at 79 District Road in Roma. He stated the following in summary:

I have worked as an irrigator for Rock Peace Farms for three years. I arrived at the tomato field (Fisher Ranch, Plot 4) at about 7:30 a.m. and began laying down aluminum sprinkler pipe. I was working alone and driving a company truck. After working for about a half an hour, I noticed a helicopter spraying the adjacent alfalfa field to the west. About 15 minutes later, I felt some mist on my face and smelled a bad odor. A few minutes later, I felt sick.

At first, I felt sick to my stomach and became dizzy, then my face started itching and I started having a real bad headache. I continued to feel sick the rest of the day and night. The next day I felt better, but I had a rash on my face and hands that lasted for about three days.

The helicopter was red and white. It was spraying about 50 yards from where I was when I felt the mist. I don't think the alfalfa field belongs to Rock Peace Farms.

I called my supervisor Mac Berger and told him what happened. He told me to drive to the doctor's office on District Road. I had never been there before but I knew where it was. Dr. Nokitofa asked me some questions and gave me some cream to put on my face. There was no follow-up visit to the doctor.

7

Important:

1. Use only one analysis report form per sample.
2. Complete chain of evidence record on reverse.
3. Use black ink and print legibly.
4. The original will be returned to you.

Shaded Area for Laboratory Use Only

LABORATORY CONDUCTING ANALYSIS

☐

ANAHEIM

☐

SACRAMENTO

DATE SAMPLE RECEIVED

TIME RECEIVED

A. Sample Analysis Requester

AGENCY NAME (Complete name)

Fairchild County Agricultural Commissioner

ADDRESS

142 Spring Street

CITY

Roma

STATE

CA

ZIP CODE

93271

TELEPHONE NUMBER

(841) 868-6212

FAX NUMBER

(841) 868-6200

B. Sample Source

PROPERTY OPERATOR / COMPLAINANT NAME

Rock Peace Farms

ADDRESS

79 District Road

CITY

Roma

STATE

CA

ZIP CODE

93721

OPERATOR IDENTIFICATION OR PERMIT NO.

TELEPHONE NUMBER

(841) 866-2867

C. Sample information

SAMPLE CONSISTS OF:

One blue short sleeved T-shirt

IS THIS A CONTROL SAMPLE?

☐

YES

☒

NO

IS THIS SAMPLE A COMPOSITE?

☐

YES

☒

NO

SAMPLE IDENTIFICATION MARKS

CS062305-1

OTHER IDENTIFICATION MARKS

COMMODITY (Acres, if applicable)

SECTION, TOWNSHIP, RANGE

33-T27S, R25E

SAMPLE LOCATION (Address or Description)

Collected from Mr. Mendoza at Hospital

SITE IDENTIFICATION NUMBER

COUNTY

Fairchild

BASIS FOR SAMPLE (Check one box, only)

☒

HEALTH
HAZARD

☐

ANIMAL ILLNESS/
SEE LOSS

☐

PLANT
SYMPTOMS

☐

ENVIRONMENTAL
EFFECTS

DESCRIPTION OF PROBLEM

Worker laying down sprinkler pipe in tomato field and may have been drifted on by a helicopter treating alfalfa field west of tomato field.

SAMPLE COLLECTOR'S SIGNATURE

PRINT NAME

DATE SAMPLE COLLECTED

June 23, 2005

D. Laboratory Instructions

SAMPLE PRIORITY (Priority descriptions on reverse side of this form)

☒

#1

☐

#2

☐

#3

SAMPLE DISPOSITION

☐

RETAIN

☐

DESTROY

☒

DESTROY, IF NEGATIVE

☐

CALL SAMPLE REQUESTER

E. Specific Analysis Requested

PESTICIDE DETECTED

AMOUNT

TOLERANCE

MDL

EXT CODE

DET CODE

☒

Chlorpyrifos (Lorsban)

Chlorpyrifos

33.46 ug

0.1ug

998

11 GP
9/2/05

☐
☐

SCREENS

☐

ORGANOPHOSPHATE (OP)

☐

CARBAMATE (CARB)

☐

CHLORINATED HYDROCARBON (CHC)

OTHER - DESCRIBE

DISLodgeABLES OR SWABS

☐

TOTAL AREA (Indicate Total Surface Area _____)

☐

DISLodgeABLE (Indicate Punch Size _____)

☐

SURFACE/SWAB (Indicate Solvent Used _____)

DATE ANALYSIS COMPLETED

September 2, 2005

CONFIRMED BY

CHEMIST'S SIGNATURE

Glendora Peoples 9/2/05

ANALYSIS RESULT FOLLOW UP DATE

☒

RESULTS FAXED / DATE

☐

RESULTS TELEPHONED / DATE

You must complete the evidence record on reverse side of this form.

SAMPLE ANALYSIS REPORT EVIDENCE RECORD

Sample Information

SAMPLE COLLECTOR (Print name)	SAMPLE IDENTIFICATION MARKS	OTHER IDENTIFICATION MARKS (LABORATORY NUMBER)
Colombo Smith	CS062305-1	

Preservation Method During Transport

<input type="checkbox"/> Ice	<input type="checkbox"/> Dry Ice	<input checked="" type="checkbox"/> "Blue" Ice	<input type="checkbox"/> Cooler	<input type="checkbox"/> Cool Dry Container	<input type="checkbox"/> Other _____	<input type="checkbox"/> None
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Container Description

<input checked="" type="checkbox"/> Paper Bag	<input checked="" type="checkbox"/> Plastic Bag	<input type="checkbox"/> Glass Jar	<input type="checkbox"/> Plastic Jar	<input type="checkbox"/> Amber Jar	<input type="checkbox"/> Other _____
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Transportation Information

REGIONAL / SATELLITE OFFICE ORIGIN	NAME OF VEHICLE DRIVER OR COMMON CARRIER	DESTINATION <input checked="" type="checkbox"/> CA Department of Food and Agriculture Center for Analytical Chemistry 3292 Meadowview Road Sacramento, California 95832 (916) 262-1568 FAX - (916) 262-1574 <input type="checkbox"/> Anaheim Residue Laboratory 169 East Liberty Avenue Anaheim, California 92801 (714) 680-7901 FAX - (714) 680-7919
<input type="checkbox"/> Anaheim (SRO) <input type="checkbox"/> Watsonville	VEHICLE LICENSE NUMBER /SHIPPING INVOICE NUMBER	
<input type="checkbox"/> Bakersfield <input type="checkbox"/> Other _____	DOT NUMBER/CLASSIFICATION (If necessary)	
<input type="checkbox"/> Fresno (CRO)	DATE SAMPLE SHIPPED	
<input checked="" type="checkbox"/> Sacramento (NRO)		

I certify that the above-listed sample is properly classified, described, packaged, marked, and labeled.
I additionally certify that this sample analysis is necessary in connection with matters relating to my official duties.

SIGNATURE	PRINT NAME	DATE	CONTACT NRO (916) 324-4100 FAX - (916) 445-7083 CRO (559) 243-8111 FAX - (559) 243-8115 SRO (714) 279-7690 FAX - (714) 279-7692
	Colombo Smith	6/23/05	

Custody Record

RECEIVED FROM (Sample Collector) (PRINT NAME)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
1. Colombo Smith	2. Tom Lee	6/23/05	1100	Transport to Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
2. Tom Lee	3. Mei Chung	6/23/05	1300	Received at Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
3.	4.			
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
4.	5.			

Laboratory Storage

SAMPLE RECEIVED BY (PRINT NAME)	DATE RECEIVED	TIME	SAMPLE CONDITION UPON RECEIPT (Lab Use Only)
STORAGE LOCATION	STORAGE DATE (If applicable)	TIME	

Sample Priority Descriptions:

"Priority # 1 " samples involve health or when remedial action can be taken to recondition food crops. Examples of this category are poisonings or pesticide drift onto crops which will soon be harvested. Samples designated "Priority #1" are usually completed within 24 hours of delivery to the laboratory. Analytical results will be telephoned and/or faxed to the requester. The original report will be sent in the mail.

"Priority #2" samples are obtained to collect information for remedial action or when no immediate threat to health or the environment is present. Examples of this category are bee kills or drift onto crops. Samples designated "Priority #2" are considered "routine" and are generally completed within one week of delivery to the laboratory. The original analytical results will be mailed; results/reports will be telephoned or faxed upon request.

"Priority #3" samples have no pressing time factor. Examples of this category are pesticide degradation studies and studies for pesticide use recommendations. Samples designated as *Priority #3" will be completed as workload permits.

Proper Sample Size and Approval for Analysis

Refer to the Evidence Collection section of the Pesticide Episode Investigation Procedure Standard for proper sample sizes. **You must obtain approval from your DPR Enforcement Branch Liaison or regional office prior to submitting samples for laboratory analysis.**

DIAL 9-1-1 IN CASE OF ANY EMERGENCY

9

Important:

1. Use only one analysis report form per sample.
2. Complete chain of evidence record on reverse.
3. Use black ink and print legibly.
4. The original will be returned to you.

Shaded Area for Laboratory Use Only

LABORATORY CONDUCTING ANALYSIS

☐

ANAHEIM

☐

SACRAMENTO

DATE SAMPLE RECEIVED

TIME RECEIVED

A. Sample Analysis Requester

AGENCY NAME (Complete name)

Fairchild County Agricultural Commissioner

ADDRESS

142 Spring Street

CITY

Roma

STATE

CA

ZIP CODE

93271

TELEPHONE NUMBER

(841) 868-6212

FAX NUMBER

(841) 868-6200

B. Sample Source

PROPERTY OPERATOR / COMPLAINANT NAME

Rock Peace Farms

ADDRESS

79 District Road

CITY

Roma

STATE

CA

ZIP CODE

93721

OPERATOR IDENTIFICATION OR PERMIT NO.

TELEPHONE NUMBER

(841) 866-2867

C. Sample information

SAMPLE CONSISTS OF:

One pound of tomato foliage

IS THIS A CONTROL SAMPLE?

☐

YES

☒

NO

IS THIS SAMPLE A COMPOSITE?

☐

YES

☒

NO

SAMPLE IDENTIFICATION MARKS

CS062305-3

OTHER IDENTIFICATION MARKS

COMMODITY (Acre, if applicable)

SECTION, TOWNSHIP, RANGE

33-T27S, R25E

SAMPLE LOCATION (Address or Description)

Middle of Rock Peace Farms tomato field.

SITE IDENTIFICATION NUMBER

COUNTY

Fairchild

BASIS FOR SAMPLE (Check one box, only)

☒

HEALTH
HAZARD

☐

ANIMAL ILLNESS/
SEE LOSS

☐

PLANT
SYMPTOMS

☐

ENVIRONMENTAL
EFFECTS

DESCRIPTION OF PROBLEM

Worker laying down sprinkler pipe in tomato field and may have been drifted on by a helicopter treating alfalfa field west of tomato field.

SAMPLE COLLECTOR'S SIGNATURE

PRINT NAME

DATE SAMPLE COLLECTED

June 23, 2005

D. Laboratory Instructions

SAMPLE PRIORITY (Priority descriptions on reverse side of this form)

☒

#1

☐

#2

☐

#3

SAMPLE DISPOSITION

☐

RETAIN

☐

DESTROY

☒

DESTROY, IF NEGATIVE

☐

CALL SAMPLE REQUESTER

E. Specific Analysis Requested

PESTICIDE DETECTED

AMOUNT

TOLERANCE

MDL

EXT CODE

DET CODE

☒

Chlorpyrifos (Lorsban)

Chlorpyrifos

0.72 ppm

0.1 ppm

998

11 GP
9/2/05

☐
☐

SCREENS

☐

ORGANOPHOSPHATE (OP)

☐

CARBAMATE (CARB)

☐

CHLORINATED HYDROCARBON (CHC)

OTHER - DESCRIBE

DISLodgeABLES OR SWABS

☐

TOTAL AREA (Indicate Total Surface Area _____)

☐

DISLodgeABLE (Indicate Punch Size _____)

☐

SURFACE/SWAB (Indicate Solvent Used _____)

DATE ANALYSIS COMPLETED

September 2, 2005

CONFIRMED BY

CHEMIST'S SIGNATURE

Glendora Peoples 9/2/05

ANALYSIS RESULT FOLLOW UP DATE

☒

RESULTS FAXED / DATE

☐

RESULTS TELEPHONED / DATE

You must complete the evidence record on reverse side of this form.

SAMPLE ANALYSIS REPORT EVIDENCE RECORD

Sample Information		
SAMPLE COLLECTOR (Print name)	SAMPLE IDENTIFICATION MARKS	OTHER IDENTIFICATION MARKS (LABORATORY NUMBER)
Colombo Smith	CS062305-3	

Preservation Method During Transport

<input type="checkbox"/> Ice	<input type="checkbox"/> Dry Ice	<input checked="" type="checkbox"/> "Blue" Ice	<input type="checkbox"/> Cooler	<input type="checkbox"/> Cool Dry Container	<input type="checkbox"/> Other _____	<input type="checkbox"/> None
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Container Description

<input checked="" type="checkbox"/> Paper Bag	<input checked="" type="checkbox"/> Plastic Bag	<input type="checkbox"/> Glass Jar	<input type="checkbox"/> Plastic Jar	<input type="checkbox"/> Amber Jar	<input type="checkbox"/> Other _____
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<input type="checkbox"/> Anaheim (SRO) <input type="checkbox"/> Watsonville	VEHICLE LICENSE NUMBER /SHIPPING INVOICE NUMBER	
<input type="checkbox"/> Bakersfield <input type="checkbox"/> Other _____	DOT NUMBER/CLASSIFICATION (If necessary)	
<input type="checkbox"/> Fresno (CRO)	DATE SAMPLE SHIPPED	
<input checked="" type="checkbox"/> Sacramento (NRO)		

I certify that the above-listed sample is properly classified, described, packaged, marked, and labeled.
 I additionally certify that this sample analysis is necessary in connection with matters relating to my official duties.

SIGNATURE	PRINT NAME	DATE	CONTACT NRO (916) 324-4100 FAX - (916) 445-7083 CRO (559) 243-8111 FAX - (559) 243-8115 SRO (714) 279-7690 FAX - (714) 279-7692
	Colombo Smith	6/23/05	

Custody Record

RECEIVED FROM (Sample Collector) (PRINT NAME)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
1. Colombo Smith	2. Tom Lee	6/23/05	1100	Transport to Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
2. Tom Lee	3. Mei Chung	6/23/05	1300	Received at Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
3.	4.			
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
4.	5.			

Laboratory Storage

SAMPLE RECEIVED BY (PRINT NAME)	DATE RECEIVED	TIME	SAMPLE CONDITION UPON RECEIPT (Lab Use Only)
STORAGE LOCATION	STORAGE DATE (If applicable)	TIME	

Sample Priority Descriptions:

"Priority # 1 " samples involve health or when remedial action can be taken to recondition food crops. Examples of this category are poisonings or pesticide drift onto crops which will soon be harvested. Samples designated "Priority #1" are usually completed within 24 hours of delivery to the laboratory. Analytical results will be telephoned and/or faxed to the requester. The original report will be sent in the mail.

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"Priority #3" samples have no pressing time factor. Examples of this category are pesticide degradation studies and studies for pesticide use recommendations. Samples designated as *Priority #3" will be completed as workload permits.

Proper Sample Size and Approval for Analysis

Refer to the Evidence Collection section of the Pesticide Episode Investigation Procedure Standard for proper sample sizes. **You must obtain approval from your DPR Enforcement Branch Liaison or regional office prior to submitting samples for laboratory analysis.**

DIAL 9-1-1 IN CASE OF ANY EMERGENCY

Important:

1. Use only one analysis report form per sample.
2. Complete chain of evidence record on reverse.
3. Use black ink and print legibly.
4. The original will be returned to you.

Shaded Area for Laboratory Use Only

LABORATORY CONDUCTING ANALYSIS

☐

ANAHEIM

☐

SACRAMENTO

DATE SAMPLE RECEIVED

TIME RECEIVED

A. Sample Analysis Requester

AGENCY NAME (Complete name)

Fairchild County Agricultural Commissioner

ADDRESS

142 Spring Street

CITY

Roma

STATE

CA

ZIP CODE

93271

TELEPHONE NUMBER

(841) 868-6212

FAX NUMBER

(841) 868-6200

B. Sample Source

PROPERTY OPERATOR / COMPLAINANT NAME

Rock Peace Farms

ADDRESS

79 District Road

CITY

Roma

STATE

CA

ZIP CODE

93721

OPERATOR IDENTIFICATION OR PERMIT NO.

TELEPHONE NUMBER

(841) 866-2773

C. Sample information

SAMPLE CONSISTS OF:

One pound of tomato foliage

IS THIS A CONTROL SAMPLE?

☐

YES

☒

NO

IS THIS SAMPLE A COMPOSITE?

☐

YES

☒

NO

SAMPLE IDENTIFICATION MARKS

CS062305-4

OTHER IDENTIFICATION MARKS

COMMODITY (Acre, if applicable)

SECTION, TOWNSHIP, RANGE

33-T27S, R25E

SAMPLE LOCATION (Address or Description)

Rock Peace Farms tomato field side next to alfalfa.

SITE IDENTIFICATION NUMBER

COUNTY

Fairchild

BASIS FOR SAMPLE (Check one box, only)

☒HEALTH
HAZARD☐ANIMAL ILLNESS/
SEE LOSS☐PLANT
SYMPTOMS☐ENVIRONMENTAL
EFFECTS

DESCRIPTION OF PROBLEM

Worker laying down sprinkler pipe in tomato field and may have been drifted on by a helicopter treating alfalfa field west of tomato field.

SAMPLE COLLECTOR'S SIGNATURE

PRINT NAME

DATE SAMPLE COLLECTED

June 23, 2005

D. Laboratory Instructions

SAMPLE PRIORITY (Priority descriptions on reverse side of this form)

☒

#1

☐

#2

☐

#3

SAMPLE DISPOSITION

☐

RETAIN

☐

DESTROY

☒

DESTROY, IF NEGATIVE

☐

CALL SAMPLE REQUESTER

E. Specific Analysis Requested

PESTICIDE DETECTED

AMOUNT

TOLERANCE

MDL

EXT CODE

DET CODE

☒

Chlorpyrifos (Lorsban)

Chlorpyrifos

1.32 ppm

0.1 ppm

998

11 GP
9/2/05☐☐

SCREENS

☐

ORGANOPHOSPHATE (OP)

☐

CARBAMATE (CARB)

☐

CHLORINATED HYDROCARBON (CHC)

OTHER - DESCRIBE

DISLodgeABLES OR SWABS

☐

TOTAL AREA (Indicate Total Surface Area _____)

☐

DISLodgeABLE (Indicate Punch Size _____)

☐

SURFACE/SWAB (Indicate Solvent Used _____)

DATE ANALYSIS COMPLETED

September 2, 2005

CONFIRMED BY

CHEMIST'S SIGNATURE

Glendora Peoples 9/2/05

ANALYSIS RESULT FOLLOW UP DATE

☒

RESULTS FAXED / DATE

☐

RESULTS TELEPHONED / DATE

You must complete the evidence record on reverse side of this form.

SAMPLE ANALYSIS REPORT EVIDENCE RECORD

Sample Information

SAMPLE COLLECTOR (Print name)	SAMPLE IDENTIFICATION MARKS	OTHER IDENTIFICATION MARKS (LABORATORY NUMBER)
Colombo Smith	CS062305-4	-----

Preservation Method During Transport

<input type="checkbox"/> Ice	<input type="checkbox"/> Dry Ice	<input checked="" type="checkbox"/> "Blue" Ice	<input type="checkbox"/> Cooler	<input type="checkbox"/> Cool Dry Container	<input type="checkbox"/> Other _____	<input type="checkbox"/> None
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Container Description

<input checked="" type="checkbox"/> Paper Bag	<input checked="" type="checkbox"/> Plastic Bag	<input type="checkbox"/> Glass Jar	<input type="checkbox"/> Plastic Jar	<input type="checkbox"/> Amber Jar	<input type="checkbox"/> Other _____
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Transportation Information

REGIONAL / SATELLITE OFFICE ORIGIN	NAME OF VEHICLE DRIVER OR COMMON CARRIER	DESTINATION <input checked="" type="checkbox"/> CA Department of Food and Agriculture Center for Analytical Chemistry 3292 Meadowview Road Sacramento, California 95832 (916) 262-1568 FAX - (916) 262-1574 <input type="checkbox"/> Anaheim Residue Laboratory 169 East Liberty Avenue Anaheim, California 92801 (714) 680-7901 FAX - (714) 680-7919
<input type="checkbox"/> Anaheim (SRO) <input type="checkbox"/> Watsonville	VEHICLE LICENSE NUMBER /SHIPPING INVOICE NUMBER	
<input type="checkbox"/> Bakersfield <input type="checkbox"/> Other _____	DOT NUMBER/CLASSIFICATION (If necessary)	
<input type="checkbox"/> Fresno (CRO)	DATE SAMPLE SHIPPED	
<input checked="" type="checkbox"/> Sacramento (NRO)		

I certify that the above-listed sample is properly classified, described, packaged, marked, and labeled.
I additionally certify that this sample analysis is necessary in connection with matters relating to my official duties.

SIGNATURE	PRINT NAME	DATE	CONTACT NRO (916) 324-4100 FAX - (916) 445-7083 CRO (559) 243-8111 FAX - (559) 243-8115 SRO (714) 279-7690 FAX - (714) 279-7692
	Colombo Smith	6/23/05	

Custody Record

RECEIVED FROM (Sample Collector) (PRINT NAME)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
1. Colombo Smith	2. Tom Lee	6/23/05	1100	Transport to Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
2. Tom Lee	3. Mei Chung	6/23/05	1300	Received at Lab.
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
3.	4.			
RECEIVED FROM (PRINT)	DELIVERED TO (PRINT)	DATE	TIME	PURPOSE
4.	5.			

Laboratory Storage

SAMPLE RECEIVED BY (PRINT NAME)	DATE RECEIVED	TIME	SAMPLE CONDITION UPON RECEIPT (Lab Use Only)
STORAGE LOCATION	STORAGE DATE (If applicable)	TIME	

Sample Priority Descriptions:

"Priority # 1 " samples involve health or when remedial action can be taken to recondition food crops. Examples of this category are poisonings or pesticide drift onto crops which will soon be harvested. Samples designated "Priority #1" are usually completed within 24 hours of delivery to the laboratory. Analytical results will be telephoned and/or faxed to the requester. The original report will be sent in the mail.

"Priority #2" samples are obtained to collect information for remedial action or when no immediate threat to health or the environment is present. Examples of this category are bee kills or drift onto crops. Samples designated "Priority #2" are considered "routine" and are generally completed within one week of delivery to the laboratory. The original analytical results will be mailed; results/reports will be telephoned or faxed upon request.

"Priority #3" samples have no pressing time factor. Examples of this category are pesticide degradation studies and studies for pesticide use recommendations. Samples designated as *Priority #3" will be completed as workload permits.

Proper Sample Size and Approval for Analysis

Refer to the Evidence Collection section of the Pesticide Episode Investigation Procedure Standard for proper sample sizes. **You must obtain approval from your DPR Enforcement Branch Liaison or regional office prior to submitting samples for laboratory analysis.**

DIAL 9-1-1 IN CASE OF ANY EMERGENCY

LOCATION/SUBJECT Rafael Mendoza	PRIORITY/WH. NO. 2005-67	OTHER ID NO.	COUNTY OF OCCURRENCE Fairchild	DATE OF OCCURRENCE 6-21-05
REPORT TYPE <input checked="" type="checkbox"/> NARRATIVE CONTINUATION <input type="checkbox"/> SUPPLEMENTAL REPORT <input type="checkbox"/> OTHER REPORT				
REMARKS				

SUMMARY

Mr. Rafael Mendoza works as an irrigator for Rock Peace Farms. On 6/21/2005 at 8:15 a.m., Mr. Rafael Mendoza reported being drifted on by a helicopter spraying Lorsban to an alfalfa field adjacent to the tomato field where he was working.

The alfalfa field belongs to Derman Farms and was being treated with Lorsban by Airways Crop Dusters. During the investigation multiple violations of pesticide safety regulations were found. Rock Peace Farms was cited for violating California Code of Regulations sections 6726, 6761, 6761.1, and 6738. Rock Peace Farms did not take the exposed worker to the doctor after he informed his supervisor of feeling ill. Rock Peace Farms failed to have a completed PSIS A-9 available at the work site and did not provide decontamination facilities for their workers in treated fields, and failed to keep Application Specific Information for the field workers. Rock Peace Farms also failed to maintain proper display of application at the work site.

Airways Crop Dusters was cited for violation of California Code of Regulations sections 6600 and 6614 and Food and Agricultural Code 12973 for applying the Lorsban and drifting onto a worker not involved in the application process. Mike Sal, the pilot for Airways Crop Dusters was also cited for the same violations.

Background information:

Violations:

The following non-compliances were documented during this investigation:

Rock Peace Farms

3CCR section 6726(c): When there are reasonable grounds to suspect that an employee has a pesticide illness.....
The exposed worker drove himself to the doctor instead of being transported by his employer.

3CCR section 6761 (a): Whenever employees are working as field workers in a treated field, the employer shall display at the worksite, a copy of a completed written Hazard Communication Information.....
Rock Peace Farms failed to have a completed PSIS A-9 available at the work site.

3CCR section 6761 (b)(1): The operator of the property shall maintain in a central location at the workplace.....
Rock Peace Farms failed to maintain proper display of application information at the work site.

3CCR section 6761 (c): The operator of the property shall inform his or her employees, before they are allowed to enter.....
Rock Peace Farms failed to inform his employee before he entered a treated field, of the location and availability of any pesticide records.

3CCR section 6761.1: Application specific Information for fieldworkers.....
Rock Peace Farms failed to maintain application records made to the tomato field available to Mr. Mendoza.

3CCR section 6768: Fieldworker Decontamination facilities.....
Rock Peace Farms did not provide decontamination facilities that included sufficient water, soap, and single use towels to Rafael Mendoza at the work site.

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REMARKS				

Airways Crop Dusters

FAC section 12973: Airways Crop Dusters applied the Lorsban in conflict with the registered label. Airways Crop Dusters made an application of Lorsban that resulted in drift onto a worker in an adjoining field during the application that was not involved with the application.

3CCR section 6600: General Standards of Care.....

The helicopter pilot drifted into a field adjacent to the treated field therefore he failed to exercise reasonable precautions to avoid contamination of the environment.

3CCR section 6614 (b)(3): Protection of Persons, Animals, and Property.....

Airways Crop Dusters violated failed to exercise precautions to avoid reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process;

Mike Sal (pilot)

FAC section 12973: Mike Sal is the pilot who applied the Lorsban for Airways Crop Dusters in conflict with the registered label. Mike Sal made an application of Lorsban that resulted in drift onto a worker in an adjoining field during the application that was not involved with the application.

3CCR section 6600: General Standards of Care.....

Mike Sal operated the helicopter for Airways Crop Dusters that drifted into a field adjacent to the treated field therefore he failed to exercise reasonable precautions to avoid contamination of the environment.

3CCR 6614 (b)(3): Protection of Persons, Animals, and Property.....

Mike Sal failed to exercise precautions to avoid reasonable possibility of contamination of the bodies or clothing of persons not involved in the application process and drifted onto Mr. Mendoza who worked in an adjacent field.

Witnesses:

Rafael Mendoza, irrigator with Rock Peace Farms, 1001 Beefsteak Ave. Apt. #3, Roma, CA
Stephen Peace, Manager with Rock Peace Farms, 79 District Rd. Roma, CA
Pilot, Mike Sal, pilot with Airway Crop Dusters, 34 County Rd. Roma, CA
Mac Berger, Supervisor with Rock Peace Farms, 79 District Rd. Roma, CA
Other witnesses?

Investigation and Statements:

On 6/23/2005 around 1330, I, Colombo Smith, a biologist with Fairchild County Agricultural Commissioner's Office interviewed Mr. Rafael Mendoza in person at his workplace located at 79 District Road in Roma. He stated the following in summary:

I have worked as an irrigator for Rock Peace Farms for three years. I arrived at the tomato field (Fisher Ranch, Plot 4) at about 7:30 a.m. and began laying down aluminum sprinkler pipe. I was working alone and driving a company truck. After working for about a half an hour, I noticed a helicopter spraying the adjacent alfalfa field to the west. About 15 minutes later, I felt some mist on my face and smelled a bad odor. A few minutes later, I felt sick.

REPORT PREPARED BY (NAME/TITLE)	DATE PREPARED	REPORT REVIEWED/APPROVED BY (NAME/TITLE)	DATE APPROVED
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LOCATION/SUBJECT Rafael Mendoza	PRIORITY/WH. NO. 2005-67	OTHER ID NO.	COUNTY OF OCCURRENCE Fairchild	DATE OF OCCURRENCE 6-21-05
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REMARKS				

At first, I felt sick to my stomach and became dizzy, then my face started itching and I started having a real bad headache. I continued to feel sick the rest of the day and night. The next day I felt better, but I had a rash on my face and hands that lasted for about three days.

The helicopter was red and white. It was spraying about 50 yards from where I was when I felt the mist. I don't think the alfalfa field belongs to Rock Peace Farms.

I called my supervisor Mac Berger and told him what happened. He told me to drive to the doctor's office on District Road. I had never been there before but I knew where it was. Dr. Nokitofa asked me some questions and gave me some cream to put on my face. There was no follow-up visit to the doctor.

During the interview with Mr. Mendoza I discovered that Mr. Mendoza received pesticide safety training in 2001 and that at the time of the drift, a completed PSIS A-9 was not available at the work site. He also stated that he is not aware of any display of pesticide application information at the office and doesn't know when the last application was made to the tomato field. He did state that his supervisor usually notifies him orally if the field he will be working in is under a restricted entry interval.

Mr. Mendoza informed me that he didn't carry any wash water, soap, or disposable towels in the truck at the time he was working in the tomato field when he felt sick and went straight to Dr. Nokitofa's office. Mr. Mendoza informed me that while at Dr. Nokitofa's office, he was decontaminated before he was examined and that his clothes were put in plastic bags. He had left them in his garage and was not sure what to do with them. I advised Mr. Mendoza how to wash his clothes and asked for his permission to collect his blue t-shirt so it could be submitted to the lab for analysis for Lorsban residues.

In the afternoon of 6/23/2005, I drove to the location where the alleged drift occurred and completed the following:

1. Drew a diagram of the proximity of the alfalfa field to the tomato field where Mr. Mendoza and laying down aluminum sprinkler pipes. (See attached diagram)
2. Took pictures of the location where the application took place, as well as close shot of the both alfalfa and tomato plants adjacent to each other (see attached photos)
3. Collected 3 different gradient samples of tomatoes plants to determine any presence of Lorsban over the MDL (see lab results)

On 6/24/2005, I interviewed Mr. Mike Sal, the pilot of the helicopter, and he stated the following in summary:

On 6/21/2005 around 8:00 am I was applying Lorsban to an alfalfa field which belong to Derman Farms, prior to and while applying the pesticide I evaluated my equipment to make sure it was in good working conditions and it was not too windy that day to do an aerial application. I noticed a field worker laying irrigation pipe in the tomato field next to the alfalfa field I was spraying but I made sure my nozzles were turned off every time I got closer to him,

On 6/24/05, I met Stephen Peace at his office and conducted a Headquarter and Employee Safety Inspection on Rock Peace Farms. Mr. Peace informed me that the tomato field Mr. Mendoza was working in had been treated several weeks earlier with Ridomil 25W (fungicide) and that the restricted entry interval was 48 hours. During the inspection, I found several violations that included not providing a completed PSIS A-9, not displaying application specific information, not informing their employees of the location of pesticide records, not providing sufficient water, soap, and disposable towels while employees are working in a treated field, and Rock

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Peace Farms failed to take a worker to the doctor's office after the worker informed his supervisor of becoming ill after being exposed to pesticides.

CONCLUSION

On 6/21/2005 at 8:15 a.m., Mr. Rafael Mendoza was laying sprinkler lines in a tomato field owned by Rock Peace Farms and reported being drifted on by a helicopter spraying Lorsban to an adjacent alfalfa field. Mr. Mendoza developed symptoms that included a headache, dizziness, stomachache, and a rash and contacted his supervisor. The supervisor advised Mr. Mendoza to drive himself to the doctor's office where he was diagnosed as having "Pesticide Exposure" and was treated with Reassurance and hydrocortisone cream.

Multiple violations of pesticide safety regulations were found during a review of records at Airways Crop Dusters and Rock Peace Farms. Rock Peace Farms was cited for violating California Code of Regulations sections 6726, 6761, 6761.1, and 6738. Rock Peace Farms did not take the exposed worker to the doctor after he informed his supervisor of feeling ill. Rock Peace Farms failed to have a completed PSIS A-9 available at the work site and did not provide decontamination facilities for their workers in treated fields, and failed to keep Application Specific Information for the field workers. Rock Peace Farms also failed to maintain proper display of application at the work site.

Airways Crop Dusters was cited for violation of California Code of Regulations sections 6600 and 6614 and Food and Agricultural Code 12973 for applying the Lorsban and drifting onto a worker not involved in the application process. Mike Sal, the pilot for Airways Crop Dusters was also cited for the same violations.

Three foliage samples collected in a gradient pattern beginning in the middle of the tomato field working towards the alfalfa field were sent to CDFA's laboratory in Sacramento for analysis were found to contain chlorpyrifos (Lorsban) residues. Mr. Mendoza's blue t-shirt was also analyzed and found to contain chlopyrifos residues. (See attached results)

Findings:

My investigation finds that there were multiple violations of pesticide safety regulations attributed to Airways Crop Dusters and Rock Peace Farms related to this episode.

Airways Crop Dusters was found in violation of the following regulations:
Food & Agricultural section 12973, 3 CCR section 6600, 3 CCR section 6614.

Rock Peace Farms was found in violation of the following regulations:
3CCR section 6726(c), 3CCR section 6761 (a), 6761 (b)(1), 6761 (c), 6761.1, 6768.

Appropriate enforcement action is pending. The enforcement actions taken and the final disposition of this case will be attached to this report when completed.

Attachments:

Clothing samples
Gradient samples
OP ID or permit for alfalfa field
NOI and PURs
Diagram of site not included
Photograph of site not included
PIR

Primary route of exposure: ☐ Oral ☒ Dermal ☐ Eye ☒ Inhalation ☐ Unknown

PHYSICIAN'S DESCRIPTION OF EXPOSURE:

Date first seen: **6/21/05**

Time first seen: **3:45 pm**

Major signs, symptoms, adverse reactions: **Headache, Nausea, dizziness, itchy face**

Hospitalized? ☒ No ☐ Yes If Yes, hospital name:

City:

Emergency room only? ☒ No ☐ Yes

Physician's office only? ☐ No ☒ Yes

Diagnostic studies ordered? ☒ No ☐ Yes If yes, which studies?

Diagnosis: **Pesticide Exposure**

Treatment: **Reassurance; Hydrocortisone Cream**

Brief description of incident (if female, indicate if pregnant):

I was irrigating a tomato field when a helicopter started spraying the adjacent alfalfa field. I felt some mist hit my face and arms. I also smelled a really bad odor that made me gag. I began to feel sick a few minutes later.

AGENCY COMPLETING FORM:

Agency/County: **Fairchild Department of Health**

By whom: **Wilbur Finletter, Public Health Nurse**

Address: **83 County Center Drive,
Roma, CA**

Phone no. **(841) 455-6377**

Form OEH-PETS 003 (Rev. 5/99)